What is claimed is:

1. A casting mold for an engine block, the casting mold comprising:

a mold seat comprising a double-curved surface; and

a cast-in cylinder liner comprising an axis and a conical chamfer, wherein the conical chamfer is in tangential contact with the double-curved surface in a seated position absent thermal expansion of the cylinder liner.

2. The casting mold of claim 1, wherein the conical chamfer forms an angle α with a plane perpendicular to the axis, such that the cylinder liner is unseated from the seated position upon thermal expansion.

3. The casting mold of claim 1, wherein the double-curved surface is a spherical segment.

4. The casting mold of claim 1, wherein the double-curved surface is a toroidal segment.

5. A casting mold for an engine block, the casting mold comprising:

a first mold seat comprising a double-curved first surface;

a second mold seat comprising a conical second surface; and

a cast-in cylinder liner comprising an axis and conical first and second chamfers, wherein the first and second chamfers are respectively in contact with the first and second surfaces at first and second contact circles in a seated position, such that upon thermal expansion the cylinder liner becomes unseated from the seated position.

6. The casting mold of claim 5, wherein the first and second chamfers form angles α_1 and α_2 respectively relative to a plane perpendicular the axis, and wherein α_1 is greater than the angle defined by $\tan^{-1}(L/2R)$, and α_2 is equal to $\tan^{-1}(L/2R)$, wherein L is the length of the cylinder liner between the contact circles and R is the inner radius of the cylinder liner at the contact circles.

7. The casting mold of claim 5, wherein the first and second chamfers form angles α_1 and α_2 respectively relative to a plane perpendicular to the axis, and wherein α_1 is greater than the angle defined by $\tan^{-1}(L/2R)$, and α_2 is greater than $\tan^{-1}(L/2R)$, wherein L is the length of the cylinder liner between the contact circles and R is the inner radius of the cylinder liner at the contact circles.

8. A casting mold for an engine block, the casting mold comprising:

a mold seat comprising a conical surface;

a cast-in cylinder liner comprising an axis and contacting the conical surface in a seated position absent thermal expansion, wherein the conical surface is inclined at an angle α with a plane perpendicular to the axis, such that upon thermal expansion the cylinder liner becomes unseated from the seated position.

9. A casting mold for an engine block, the casting mold comprising:

a first mold seat comprising a conical first surface;

a second mold seat comprising a conical second surface;

a cast-in cylinder liner comprising an axis and first and second end surfaces contacting the first and second surfaces in a seated position absent thermal expansion, wherein the first and second surfaces are inclined at angle α_1 and α_2 respectively with a plane perpendicular to the axis, such that upon thermal expansion the cylinder liner becomes unseated from the seated position.

10. The casting mold of claim 9, wherein at least one of the first and second end surfaces is a conical surface.

11. The casting mold of claim 9, wherein at least one of the first and second end surfaces is a double-curved surface.

12. A casting mold for an engine block, the casting mold comprising:

a first mold seat comprising a double-curved first surface;

a second mold seat comprising a double-curved second surface; and

a cast-in cylinder liner comprising an axis and first and second chamfers, wherein the first and second chamfers are respectively in tangential contact with the first and second surfaces at first and second contact circles in a seated position, such that upon thermal expansion the cylinder liner becomes unseated from the seated position.

13. The casting mold of claim 12, wherein the first and second chamfers are inclined at angles α_1 and α_2 respectively relative to a plane perpendicular the axis, and wherein α_1 is greater than the angle defined by $\tan^{-1}(L/2R)$, and α_2 is equal to $\tan^{-1}(L/2R)$, wherein L is the length of the cylinder liner between the contact circles and R is the inner radius of the cylinder liner at the contact circles.

14. The casting mold of claim 12, wherein the first and second chamfers form angles α_1 and α_2 respectively relative to a plane perpendicular the axis, and wherein α_1 is greater than the angle defined by $\tan^{-1}(L/2R)$, and α_2 is greater than $\tan^{-1}(L/2R)$, wherein L is the length of the cylinder liner between the contact circles and R is the inner radius of the cylinder liner at the contact circles.

15. The casting mold of claim 14, wherein $\alpha_1 = \alpha_2$.

16. The casting mold of claim 12, wherein each double-curved surface comprises a spherical portion.

17. The casting mold of claim 12, wherein each double-curved surface comprises a toroidal portion.

18. A casting mold for an engine block, the casting mold comprising:

a first mold seat comprising a first surface;

a second mold seat comprising a second surface; and

a cast-in cylinder liner comprising an axis and first and second end surfaces, wherein the first and second end surfaces are respectively in tangential contact with the first and second surfaces in a seated position, such that upon thermal expansion the cylinder liner becomes unseated from the seated position.

19. The casting mold of claim 18, wherein the first surface is double-curved.

20. The casting mold of claim 18, wherein the first surface is conical.

21. A method of manufacturing a casting mold for an engine block, the method comprising:

providing a first mold seat comprising a first surface;

providing a second mold seat comprising a second surface; and

placing a cast-in cylinder liner in a seated position in contact with the first and second surfaces respectively at first and second end surfaces of the cylinder liner absent thermal expansion, wherein the first surface is shaped such that upon thermal expansion the cylinder liner becomes unseated.

22. The method of claim 21, wherein the first surface comprises a double-curved portion in contact with the first end surface of the cylinder.

23. The method of claim 21, wherein the first surface comprises a conical portion in contact with the first end surface of the cylinder liner.

24. The method of claim 21, wherein the second surface is shaped such that upon thermal expansion the cylinder liner is unseated from the seated position.

25. The method of claim 24, wherein the second surface comprises a double-curved portion in contact with the second end surface of the cylinder liner.

26. The method of claim 24, wherein the second surface comprises a conical portion in contact with the second end surface of the cylinder liner.